



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,743	03/31/2008	Rosa Cuberes Altisen	006444.00053	9854
22907 7590 08/19/2010 BANNER & WITCOFF, LTD. 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051				
EXAMINER				
SHAMEEM, GOLAM M				
ART UNIT		PAPER NUMBER		
1626				
MAIL DATE		DELIVERY MODE		
08/19/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/589,743

**Applicant(s)**

CUBERES ALTISEN ET AL.

**Examiner**

Golam M. M. Shameem

**Art Unit**

1626

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16, 40-42 and 65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/GS-08)  
Paper No(s)/Mail Date 05/20/2008
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

#### **DETAILED ACTION**

##### ***Priority***

This application is a 371 of PCT/EP2005/001465 02/14/2005 and the claim of foreign priority under 35 U.S.C. § 119(a)-(d) to EPO 04021974.3 09/16/2004 is acknowledged.

##### ***Status of Claims***

Claims 1-16, 40-42 and 65 are currently pending in the application.

Receipt is acknowledged of amendment / response filed on June 14, 2010 and that has been entered.

Claims 16, 41, 42 and 65 are withdrawn from further consideration pursuant to 37 C.F.R. 1.142 (b) as being drawn to a non-elected subject matter.

##### ***Information Disclosure Statement***

Receipt is acknowledged of Information Disclosure Statement (IDS), filed on 05/20/2008, which has been entered in the file.

##### ***Response to Election/Restriction***

In response to the restriction requirement, Applicants have elected Group I, which includes claims 1-15, drawn to a compound of the formula I, with traverse is acknowledged. Applicant's arguments (to withdraw restriction requirements) have been fully considered and found partially persuasive and therefore, Examiner has agreed to modify the restriction requirements to include and examine Group III, claim 40 together with the elected invention of Group I, because it commensurates within the scope of the elected invention.

However, the Examiner respectfully disagrees with the Applicant's other arguments at this time because the Invention groups I-V differ materially in structure and in element from each other and therefore, are capable of supporting their own patents. The invention Groups I-V each relate to a set of structurally diverse and dissimilar compounds [having different variable groups, which are attached directly and indirectly to the formula I], process of preparation and their methods of use, which do not possess a substantial common core wherein a reference anticipating one would not necessarily render the other obvious. The core does not define a contribution over the art. The ring structure of formula I is further substituted by different variables such as  $R^2$ ,  $R^3$  and  $R^4$  etc, which are broadly defined and when the compound of formula I is taken as a whole, a plethora of vastly different compounds are possible. Thus, these features are not considered 'special technical features' under PCT rules 13.1 and 13.2. Hence, the unity of invention is considered to be lacking and restriction of the invention in accordance with the rules of unity of invention is considered to be proper.

In addition, 35 U.S.C. 372 (b)(2) clearly states that unity of invention may be reexamined under 35 U.S.C. 121. Restriction was based on PCT Rule 13.1, 13.2 and Annex B part 1(b) together with 37 CFR 1.475 and 1.499 for lacking unity of invention because of lacking a significant structural element qualifying as the special technical features.

PCT Rule 13.2 states that the international application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept (requirement of unity of invention).

PCT Rule 13.2 states that unity of invention referred to in Rule 13.1 shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features.

Annex B (2)(V) when dealing with alternatives, if it can be shown that at least one Markush alternative is not novel over the prior art, the question of unity of invention shall be reconsidered by the Examiner. Reconsideration does not necessarily imply that an objection of lack of unity shall be raised. If the Examiner finds one of the inventions unpatentable over the prior art the evidence or admission may be used in a rejection under 35 U.S.C. 103 (a) of the other invention. Nevertheless, Examiner may reconsider to rejoin one method of use claim commensurates in scope with the product claims when the case would be found in condition for allowance [provided that method of use claim is free from 35 U.S.C. §112 first (including written description, reach-through claim language and/or scope-enablement issues) and second paragraphs]. For these reasons, Applicant's arguments are found unpersuasive and, since 35 U.S.C. 101 allows one patent per invention, the requirement for restriction (election of species) is still deemed proper.

Applicants preserve their right to file a divisional on the non-elected subject matter.

As set forth in the restriction requirement and an election of a single compound (or set of compounds), the invention will encompass all compounds that fall within the scope of the election is as follows:

A compound of the formula I wherein:

R<sup>1</sup> is as claimed,

R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are as claimed,

R<sup>3</sup> and R<sup>4</sup> are as claimed except “~~a linear or branched C<sub>1-6</sub> alkyl group,~~ and SO R<sup>10</sup>.”

R<sup>7</sup> is as claimed and all other variables are as defined.

As a result of the election and the corresponding scope of the compound identified, claims 16, 41, 42 and 65 and the remaining subject matter of claims 1-15 and 40 are withdrawn from further consideration pursuant to 37 CFR 1.142 (b) as being drawn to non-elected inventions. The withdrawn subject matter of claims 16, 41, 42 and 65 is properly restricted as it differs materially in structure and in element from the elected subject matter supra so as to be patentably distinct therefrom.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. § 103(a), which forms the basis for all obviousness rejections, set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-15 and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Stevenson *et al* (1989). Applicant claims substituted pyrazoline compounds of formula I, process of preparation and their method of uses thereof.

#### ***Determination of the scope and content of the prior art (MPEP §2141.01)***

Stevenson *et al* (1989) also teach the synthesis of many substituted pyrazoline compounds similar to those of instantly claimed invention.

#### ***Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)***

The difference between the claimed compound and that of the reference herein lies in the selection of a single substitution in core phenyl ring carbon of pyrazoline compound of formula I, such as, an alkyl group ( $R^5$ ) of instantly claimed compound instead of a hydrogen atom for the same position in the prior art [wherein corresponding  $R^6$  is halogen (Cl) and  $R^7$  is hydrogen, STN International, HCAPLUS database, RN 118010-87-0, a copy is provided with this Office action], wherein all other substitutions in core pyrazoline compound of formula I are identical.

*Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)*

It would have been *prima facie* obvious to one having ordinary skill in the art at the time of the invention was made since Stevenson *et al* teach compounds which are generic to the instantly claimed compound. It is well established that the substitution of an alkyl group for hydrogen on a known compound is not a patentable modification absent unexpected or unobvious results. *In re Wood*, 199 U.S.P.Q. 137 (C.C.P.A. 1978) and *In re Lohr*, 137 U.S.P.Q. 548, 549 (C.C.P.A. 1963). Therefore, in the instant case, one skilled in the chemical art would be motivated to choose to replace a hydrogen atom with an alkyl group or *vice versa* in view of the known teaching of the art. Since the core compound of the formula is not novel and the novelty (if there is any) belongs to the selection of substitution, a great caution should be exercised to determine the patentability of the claimed invention. Therefore, in looking at the instant claimed compounds as a whole, the claimed compound would have been suggested to one skilled in the art unless unobvious or unexpected results can be shown.

***Objections***

Claims 1-15 and 40 are objected to for containing non-elected subject matter. The claims should be amended to exclude non-elected subject matter and within the scope of elected compound.

The expression "solvate" should be deleted from claim 1 (line 8, page 3, and all other occurrences if any) because the term is undefined by Applicant's disclosure.

***Telephone Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Golam Shameem, Ph.D. whose telephone number is (571) 272-0706. The examiner can normally be reached on Tuesday-Friday from 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane, can be reached at (571) 272-0699. The Unofficial fax phone number for this Group is (703) 308-7921. The Official fax phone number for this Group is (571) 273-8300.

When filing a FAX in Technology Center 1600, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [joseph.mckane@uspto.gov]. All Internet e-mail communications will be made of record in the application file. PTO employees will not communicate with applicant via Internet



e-mail where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is of record an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the applicant. See the Interim Internet Usage Policy published by the Patent and Trademark Office Official Gazette on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, whose telephone number is (571) 272-1600.

/Golam M. M. Shameem/  
Primary Examiner  
Art Unit 1626  
Technology Center 1600



Application/Control Number: 10/589,743  
Art Unit: 1626

Page 10